STEETS SHEET NO. S2 OF S26 SHEETS

## ① Q-BR

## TOTAL BILL OF MATERIAL

Each			
O. V.	, ,	-	1
Cu. Yd.	-	260	260
Cu. Yd.	-	449.3	449.3
Cu. Yd.	322.3	-	322.3
L. Sum	1	-	1
Each	5730	-	5730
Each	30	-	30
Pound	85400	31910	117310
Pound	-	8950	8950
Each	542	262	804
Each	1	-	1
Sq. Yd.	1620	-	1620
Sq. Yd.	1871	-	1871
Sq. Ft.	-	510	510
Each	2	-	2
Each	10	-	10
Foot	183	-	183
Foot	-	792	792
Foot	-	792	792
Each	-	2	2
Sq. Ft.	- 1	867	867
Each	- 1	46	46
Cu. Yd.	-	4	4
Cu. Yd.	-	40	40
Each	-	1	1
Each	-	1	1
Cu. Yd.	-	224	224
Sq. Yd.	- 1	1301	1301
Sq. Yd.	- 1	1301	1301
Foot	117.5	-	117.5
Foot	-	133	133
Foot	- 1	174	174
Sq. Yd.	-	107	107
Each	-	40	40
Each	-	20	20
Each	-	20	20
Sq. Yd.	502	-	502
Sq. Yd.	150	-	150
	L. Sum  Each Each Pound Pound Pound Pound Each Sq. Yd. Sq. Yd. Sq. Ft. Each Foot Foot Foot Cu. Yd. Cu. Yd. Each Cu. Yd. Sq. Yd. Sq. Yd. Each Cu. Yd. Each Cou. Yd. Sq. Yd. Foot Foot Foot Foot Foot Foot Foot Foo	L. Sum 1  Each 5730  Each 30  Pound 85400  Pound -  Each 1  Sq. Yd. 1620  Sq. Yd. 1871  Sq. Fi  Each 10  Foot -  Each -  Sq. Ft  Each -  Cu. Yd  Cu. Yd  Each -  Cu. Yd  Sq. Yd  Foot -  Foot -  Each -  Cu. Yd  Sq. Yd  Sq. Yd  Foot -  Foot -  Sq. Yd  Sq. Yd	L. Sum 1 Each 5730 Each 30 Pound 85400 31910 Pound Seach 1 Each 1 Foot 183 Foot Foot 792 Each Each Each Each Each Each 1

Asbestos Bearing Pad Removal

Proposed Ground Surface (approx.) Top of Temporary Sheet Piling El. 538.8 W. Abut. El. 538.3 E. Abut.

Temporary Sheet Piling (S=5.4 in<sup>3</sup>/ft.) W. Abut Min. Section Modulus=  $(S=10.7 \text{ in}^3/ft) E. Abut.$ Min. Embedment = 7'-0" W. Abut.

10'-6" E. Abut.

Bottom of Temporary El. 531.8 W. Abut. El. 527.8 E. Abut.

5'-3" min.

= Removal of Existing Structures

BOWMAN, BARRETT & ASSOCIATES INC. CONSULTING ENGINEERS

TOTAL BILL OF MATERIALS U.S. ROUTE 6 OVER NETTLE CREEK FAU 5952-SEC. Q-BR GRUNDY COUNTY STATION 449+79.12 S.N. 032-0107

GENERAL NOTES AND

## GENERAL NOTES

Fasteners shall be high strength bolts. Bolts  $^{7}8$ "  $\phi$ , open holes  $^{15}$ <sub>16</sub> "  $\phi$ , unless otherwise noted.

Calculated weight of Structural Steel = 197500 lbs. AASHTO M270 Grade 36

Reinforcement bars shall conform to the requirements of ASTM A706 Gr. 60 (IL modified). See Special Provisions.

The Steel H Piles shall be according to AASHTO M270 Grade 50

Field welding of construction accessories will not be permitted to beams or airders.

Anchor bolts shall be set before bolting diaphragms over supports.

The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the wide flange beams and all splice plate material except fill plates.

Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 18 inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two  $^{\prime}8^{\prime\prime}$  adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims. For Type I Elastomeric Bearings, two 18" adjusting shims shall be provided for each bearing and

The Contractor shall drive one HP10x42 test pile in a permanent location at each abutment before ordering the remainder of piles. The test pile(s) shall be driven to 110 percent of the Nominal Required Bearing indicated in the pile data information.

The concrete for bridge floors finished according to Article 503.16(a) of the Standard Specifications, shall be placed and compacted parallel to the skew in uniform increments along centerline of the bridge. The finishing machine, when required, shall be set parallel to the skew for striking off and screeding the concrete.

Concrete Sealer shall be applied to the seat area of the abutments.

If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

All construction joints shall be bonded.

If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06 of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.

The Inorganic zinc rich primer/Acrylic/Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Reddish Brown, Munsell No 2.5YR 3/4. See special provision for "Cleaning and Painting New Metal Structures."

DESIGNED	LT/MRM
CHECKED	UM
DRAWN	MTR/MRM
CHECKED	BLU

Sheet Piling El. 520.8 W. Abut. El. 516.8 E. Abut. (Above diagram is drawn looking perpendicular to & roadway)

DATE: 3/19/07

Bk. Existing Abut.

Exist. Steel Piles --!

Bottom of Temporary

on the boring logs. Stage 1 Sheeting 35'-0" min.

Hard driving conditions may be encountered during the

appropriate driving equipment for the soil conditions indicated

sheet piling installation. The contractor shall provide the

Stage 2 Sheeting Bk. Proposed Abut. 18'-6<sup>1</sup>4" min. Existing Ground Surface (approx.) Top of Temporary Sheet Piling Approach Pavement El. 536.2 W. Abut. El. 536.2 E. Abut.

EI. 531.3 W. Abut. Exist, concrete Exist. Abut. Excavation 1 imits 527.8 W. Abut. El. 527.3 E. Abut. El. 524.3 W. Abut. El. 520.3 E. Abut.

> 9'-0" 9'-6" \* at Right Angles to Abutment

TEMPORARY SHEET PILING

130 E. RANDOLPH STREET CHICAGO, ILLINOIS 60601

JOB NO. 541